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**COMDTINST 4105.7** FEB 22 2002

#### **COMMANDANT INSTRUCTION 4105.7**

Subj: EQUIPMENT/SYSTEM INTEGRATED LOGISTICS SUPPORT PLAN (EILSP)
AND EQUIPMENT SUPPORT SHEET (ESS) DEVELOPMENT AND
MAINTENANCE RESPONSIBILITIES

**Ref**: (a) Systems Acquisition Manual, COMDTINST M4150.2 (series)

- (b) Integrated Logistics Support Plan (ILSP) Development and Management Responsibility, COMDTINST 4105.1 (series)
- (c) Acquisition and Management of Integrated Logistics Support (ILS) for Coast Guard Systems and Equipment, COMDTINST 4105.2 (series)
- (d) Electronics Manual, COMDTINST M10550.25 (series)
- (e) Naval Engineering Manual, COMDTINST M9000.6 (series)
- (f) Engineering Logistics Concept of Operations, COMDTINST 4100.7
- 1. <u>PURPOSE</u>. This Instruction establishes the policy, management responsibility, and defines requirements for development of an Equipment/Systems Integrated Logistics Support Plan (EILSP) and Equipment Support Sheet (ESS) for Coast Guard systems and equipment.
- 2. <u>ACTION</u>. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall ensure compliance with the provisions of this Instruction. Anyone responsible for purchasing or supporting Coast Guard equipment shall follow the guidance of this Instruction.
- 3. <u>DIRECTIVES AFFECTED</u>. This Instruction does not cancel or change other directives. Numerous directives, however, are applicable to this Instruction. Some of these may be outdated or in the process of being rewritten. Where conflicts arise regarding EILSPs, the general principles of this Instruction shall take precedence.

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NON-STANDARD DISTRIBUTION:

- 4. <u>APPLICABILITY</u>. This Instruction applies to all Coast Guard offices and activities involved with the acquisition, planning and management of the support of platforms, systems, and equipment. This Instruction shall be used as a guide for EILSP development and management, and as a reference for EILSP format and content.
- 5. <u>DISCUSSION</u>. This Instruction identifies overall responsibility for documenting the required technical and logistical support information for Coast Guard equipment. Coast Guard equipment is that equipment or group of equipment considered a system managed or maintained by Coast Guard units. The Equipment/System Manager shall define the equipment/systems for which an EILSP and associated ESS will be developed. The documents shall be developed for new acquisitions by the Equipment/System Manager during the acquisition process. These documents shall be appended to the system's Integrated Logistics Support Plan (ILSP) as supplemental information after the ILSP is transitioned from the acquisition project to the support program manager. References (a) thru (d) provide guidance for applying a uniformed approach to integrating logistics support during the acquisition process and for the development of ILSPs.
- 6. **REPORTS**. This Instruction requires no additional forms or reports.

# C. I. PEARSON Acting Assistant Commandant for Systems

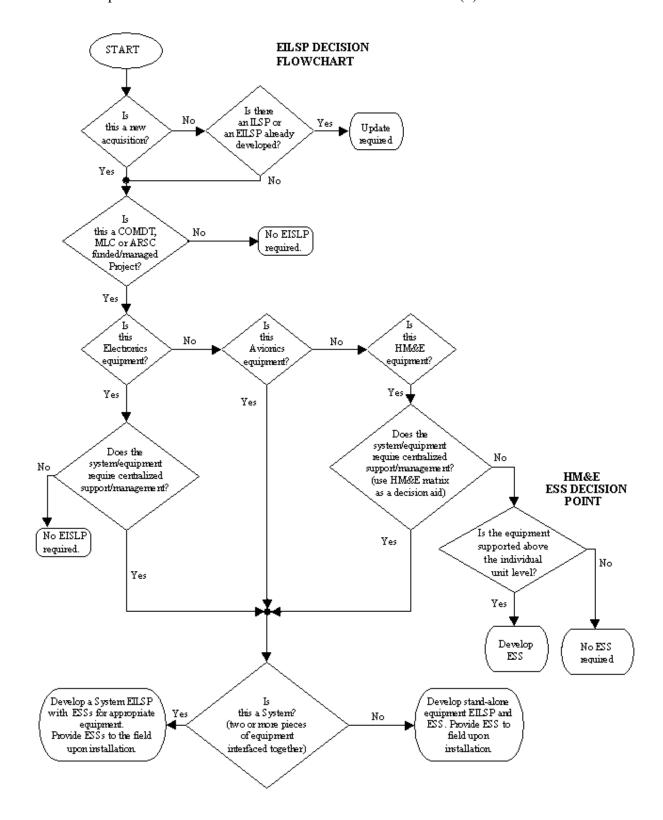
Encl: (1) Roles, Actions and Responsibilities

- (2) EILSP Development Decisions
- (3) EILSP Procedural Guide for Format and Content
- (4) EILSP and ESS Decision Matrix for HM&E Equipment
- (5) Equipment Support Sheet Procedural Guide
- (6) Acronyms

# ROLES, ACTIONS AND RESPONSIBILITIES:

- A. Logistics support plans are a record of the logistic support information about systems and equipment throughout their life cycle. An EILSP describes the integrated logistics support philosophy for specific equipment/systems at lower levels of indenture than the ILSP for the end-item system. Equipment within a system is usually upgraded throughout its life cycle and several systems within the Coast Guard may share common equipment. The scope of each EILSP will vary relative to the complexity of each equipment/system.
- B. Logistics efforts are data-collection intensive. Data shall be collected in electronic format whenever practicable. The information shall be transferred electronically between automated information systems that support Coast Guard asset visibility and logistics operations. This process provides controlled access to all data and links the acquisition, logistics, and operational communities. The developer of the EILSP (the Equipment/Systems Manager or designee) shall insure that the data collected in preparation of the plan is provided to the appropriate Configuration Data Manager for inclusion in Coast Guard databases. Generally the Equipment/System Manager and the Configuration Data Manager will be working for the same Headquarters unit (i.e., ARSC, ELC, TISCOM, C2CEN, LSU). When the Equipment/System Manager is not attached to the Headquarters Unit, care must be taken to insure the accumulated data and the plan meet the requirements of that unit.
- C. The appropriate Equipment/System Manager shall designate the equipment for which EILSP/ESS will be developed, guided by policy and decisions from Coast Guard Headquarters, Headquarters Units and Maintenance Logistics Commands (MLCs). For new equipment, the appropriate Equipment/Systems Manager, working closely with the project manager, will develop the EILSP and associated ESS. (See Enclosure (2), Equipment/System Integrated Logistics Support Plan (EILSP) Development Decisions). For existing systems, the appropriate Equipment/Systems Manager is responsible for the development or updating of the documents. Existing documents, such as previously prepared Equipment Integrated Logistics Support Plans, should be updated as needed to provide the information, but not the format, required by this Instruction. Support requirements for the end-item system can be found in the Integrated Logistics Support Plan (ILSP). The outline provided in Enclosure (3) will serve as a guide for documenting the required logistic support information and developing each section of the EILSP. Regardless of the complexity of the equipment/system, all logistics support elements should be addressed in the document. Prior to its promulgation, the draft EILSP shall be circulated to all appropriate matrix team members responsible for supporting the equipment for their review and comment. To expedite development and maximize the flow of information, access to the draft, whenever possible, should be electronic.
- D. The EILSP/ESS originator is responsible for data collection, concurrent clearance, and distribution. The Commanding Officer of the Equipment/System Manager's unit shall approve the final plan and arrange for its publication (preferably on the Command's web site). All commands affected by the EILSP shall be included in the concurrent clearance process (MLCs shall concur for their subordinates). Any objections/comments should be adjudicated or responded to prior to the promulgation of the EILSP/ESS. If necessary, a

- clearly marked, draft plan may be provided to maintenance activities until the approved version is promulgated.
- E. EILSP development criteria: All supported aviation equipment/systems and centrally supported electronics equipment/systems that require a nomenclature per reference (d) shall have an EILSP. The requirement for EILSPs and ESSs for Hull, Mechanical and Electrical (HM&E) equipment will be based on the criteria set forth in Enclosure (4). Other circumstances could dictate the requirement for an EILSP for other equipment/systems (i.e., Other Government Agency (OGA) managed items maintained by Coast Guard units, equipment/systems commercially maintained under contract to the Coast Guard, or systems procured through the major acquisition process that have an ILSP, such as the surface search radars that are installed on a larger system.
- F. EILSPs for new assets shall be published prior to the first operational installation/use of the equipment. When this is not possible, an Equipment Support Sheet (ESS) shall be developed for each major end item of the system that requires an EILSP. The ESS is a concise summary of the supply, maintenance, technical documentation and training support information contained in the EILSP. The ESS is normally equipment specific rather than system specific. The ESS provides a quick reference of information to personnel responsible for maintaining and supporting the equipment. The ESS shall be provided to the units receiving the equipment and the appropriate maintenance support command at delivery/installation of the equipment. For major acquisitions, draft ESS documents should be developed for use during the operational test and evaluation phase of the acquisition. Enclosure (5) provides a format and specifies the minimum required information to be included in the ESS.
- G. The EILSP is a dynamic document, updated and kept current by the Equipment/System Manager throughout the operational lifecycle of the equipment. The process does not stop when the EILSP is approved. The EILSP/ESS must be amended to reflect changes made in maintenance, support, supply, or training programs. When making a change to an equipment or system, the <u>first step</u> shall be to obtain approval for the proposed configuration change. This process is outlined in the appropriate engineering manuals (references (e) and (f)). Since an Engineering Change Request (ECR) requires much of the same information required to update the EILSP, working both processes simultaneously can reduce the resources necessary for data gathering. After the ECR has been approved and work on the support package begins, the approved ECR may be included as an attachment to the EILSP.
- H. Although not a part of the actual EILSP document, a Cover Sheet, Letter of Promulgation, and a Distribution List must accompany each EILSP. EILSPs shall be tailored to the level required and contain the information outlined in Enclosure (3) and in the same order as specified. Any item not applicable for any category shall be marked "not applicable" or "N/A". This will ensure uniformity and standardization when developing an EILSP. Additional items may be added as necessary.



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# EILSP PROCEDURAL GUIDE FOR FORMAT AND CONTENT

#### **SECTION 1.0 - INTRODUCTION**

- 1.1 <u>General</u>. Briefly describe the objective of the Equipment/Systems Integrated Logistics Support Plan (EILSP) for the specific equipment/system and summarize the current status of the project.
- 1.2 <u>Justification</u>. If replacing equipment/system, provide justification for replacement. State the impact (mission capability and financial) of not replacing the existing equipment/system. If new equipment/system, provide the mission requirements.
- 1.3 <u>Applicable Documents</u>. List all <u>relevant</u> acquisition/support documents including, but not limited to Mission Needs Statement (MNS), Operational Requirements Document (ORD), Required Operational Capability/Project Operating Environment (ROC/POE), Integrated Logistics Support Plans (ILSP), and contracts applicable to logistics support.
- 1.4 <u>Planned Life Cycle</u>. Identify the planned/projected service life of the equipment/system. For example, if the service life of the equipment is eight years, then support of that equipment must be planned for eight years.
- 1.5 <u>Operational Availability (Ao)</u>. State the <u>required</u> Ao or the Mission Criticality Codes (MCCs). Include reference documents from which the Ao was derived. A specific piece of equipment may have different MCCs for each platform it is installed on.
- 1.6 <u>Operational Environment</u>. Summarize the planned operational environment; identify any known constraints or unique support considerations generated by the operational environment.

## **SECTION 2.0 - PROJECT MANAGEMENT**

- 2.1 <u>Authority</u>. Identify the equipment/system manager for the equipment/system. Identify the command/office responsible for the development of the EILSP.
- 2.2 <u>Updating of EILSP</u>. Review the EILSP annually as a minimum and update as required. Identify the organization responsible for updates, and to whom recommendations, changes and comments should be sent.
- 2.3 <u>Preparing Activity</u>. Provide the Point of Contact (POC), by Command/Division, for the preparing activity.
- 2.4 <u>Project Officer</u>. Identify who, by Command/Division, will assume overall responsibility for the project, requesting funding, initiating procurement and acquisition of the equipment/system, prototype management and developing the installation plans.

- 2.5 <u>Program/Facility Manager</u>. Identify, by Command/Division, all Program/Facility Managers who will be the sponsors of the equipment/system. Also, identify any other programs that will be affected by the acquisition of this equipment/system (e.g., the Program Managers for all floating platforms or shore stations). Include POC information.
- 2.6 <u>Integrated Logistics Support (ILS) Manager</u>. Identify the roles and responsibilities of the Integrated Logistics Support Manager. Include POC information.
- 2.7 <u>Equipment Configuration Manager</u>. Identify, by Command/Division, the Equipment Configuration Manager who will provide configuration management, configuration status accounting and control. Include POC information.
- 2.8 <u>Configuration Data Manager(s)</u>. Identify the Configuration Data Manager(s) who is/are responsible for processing all Allowance Change Requests (ACRs), Configuration Change Forms (CCFs) and creating change letters for allowance changes. Include POC information.
- 2.9 <u>Training Manager</u>. State who (by command/office) will identify and implement personnel training philosophies and potential training requirements. Include POC information.
- 2.10 <u>Item Manager</u>. Identify the Item Manager(s) responsible for determining initial provisioning and supply support requirements, material distribution, procurement and life cycle support of repairable and consumable items. Include POC information.
- 2.11 <u>Systems Management & Engineering Facility (SMEF)</u>. Identify, by Command and Division, who will provide information on follow-on logistics (all elements), configuration management, phase-outs, data management and maintenance. Include POC information.
- 2.12 <u>Equipment Installation Manager</u>. Identify who is responsible for arranging installation of the equipment/system for the project (e.g., G-SCE, ELC, CG Yard, Navy, etc.). Include POC information.
- 2.13 <u>Equipment Phase-Out Manager</u>. Identify who will be the Equipment Phase-Out Manager for this equipment/system. Include POC information.

# **SECTION 3.0 - BUDGET AND ACQUISITION PLANS**

(As applicable to the equipment/system, provide some or all of the following information.)

3.1 <u>Source of Funding/Follow-on Funding</u>. Identify source of funding for support of the equipment/system. Refer to budgetary documents (i.e., Resource Proposal (RP), etc.) where appropriate. Specify whether follow-on funding will be required as a recurring item. State how funding will be provided and who (program/sponsor) will provide it.

- 3.2 <u>Acquisition Strategy</u>. In concert with the Integrated Product Team (IPT), including the contracting officer and G-LPL counsel, the Project Officer or procuring official should integrate logistics and equipment planning with acquisition and competition-related concerns applicable to different requirements. Identify means of obtaining the new equipment/system (e.g., Military Interdepartmental Purchase Request (MIPR), request to Navy or Other Government Agency (OGA), commercial contract, construction of equipment at CG facility, funding type and source). Identify anticipated follow-on acquisition philosophy.
- 3.3 <u>Acquisition Budget/Schedule</u>. Provide budget and schedule for entire acquisition, including a schedule of when funds and resources will be required. List budget requirements by fiscal year and total for the project (if applicable). Provide milestones for the acquisition; identify major decision points/milestones. Specify whether follow-on funding will be required as a recurring item. State how the funding will be provided and who (program) will provide it.
- 3.4 <u>Life Cycle Costs</u>. Document life cycle costs (or estimates of costs) of equipment. Include acquisition costs, spares, installation, operating expenses, manpower, training, support equipment, maintenance and disposal.

# **SECTION 4.0 - EQUIPMENT DESCRIPTION AND CONCEPTS**

- 4.1 <u>Equipment/System Description</u>. Describe the equipment to be acquired as completely as possible in terms of its functions and performance. Explain the mission characteristics of the equipment as it applies to its intended use. Briefly describe the equipment/system to be supported in terms of purpose, and its major components.
- 4.2 <u>Equipment /System Physical Description</u>. List the approved nomenclatures, noun names, weight and dimensions, set relations, family structure hierarchy and variations of the equipment. List each major sub-component separately and provide a brief explanation. If no approved nomenclature exists for ELEX systems/equipment, request nomenclature from the ELC Accountable Item Management (AIM) system Nomenclature Manager.
- 4.3 <u>Technical Specifications</u>. Identify the capabilities, modes of operation, input power requirements, etc. It should be clear that the characteristics satisfy the operational requirements of the equipment.
- 4.4 <u>Equipment Interfaces/Integration Requirements</u>. Identify all major equipment that will connect to or interact with the supported equipment. The originator shall determine the level of indenture for this effort. Use nomenclature and noun name for each piece of equipment identified. Address any Standardization and Interoperability requirements.
- 4.5 <u>Security Requirements</u>. Identify security-handling requirements for the equipment/system.
- 4.6 <u>Impact on Units</u>. Identify any adverse or beneficial physical and/or operational impact on the platform or facility as a result of installing the new equipment. This may include

- weight and moment/balance, requirements to move existing equipment, availability of rack space, space for storing spare parts, impact to adjacent equipment (blocking directional antennas), etc.
- 4.7 <u>Interference and Safety Considerations</u>. Identify any interference or safety hazards, which must be considered when working on the supported equipment. This may include hazardous material (HAZMAT) or Radio Frequency (RF) hazards, radiation hazards, shock hazards, electrostatic discharge, electromagnetic interference, corrosives, rotating machinery, enclosed space considerations, etc.
- 4.8 <u>Property Reporting</u>. Identify the applicable property-reporting database, which will be used. Provide all information required to report the equipment in the asset database, e.g., assigned nomenclature, parent-child relationship (if any), cost and manufacturer.

# SECTION 5.0 - INSTALLATION AND PHASE-OUT PLANS

- 5.1 Installation Plans.
- 5.1.1 <u>Number of Installations by Platform or Shore Facility</u>. State the total number of equipment to be installed by platform or shore facility. A table may be used to state information. Include information on any prototype installations.
- 5.1.2 <u>Locations of installations</u>. Describe the physical location(s) on the platform, by unit type, where the equipment is to be installed. The reader should be able to physically locate the equipment from this description.
- 5.1.3 <u>Installation Schedule and Staging Material</u>. Provide planned installation schedules, identify staging material required, including initial spares, and identify where the material will come from. (Consider production and delivery schedules when planning). Include contractor and Coast Guard POC information.
- 5.1.4 <u>Method of Installation</u>. Describe the method of installation and type of installation kits needed. Identify any referenced installation packages.
- 5.1.5 <u>Prototype Installations</u>. List units selected to prototype the equipment/system. State who will install and remove (upgrade) the prototype installation when testing is complete. Identify lessons learned and installation issues not resolved.
- 5.1.6 <u>Alteration Documentation</u>. State who will develop and provide the appropriate documentation (e.g., Engineering changes) once the new acquisition takes place and the time frame required for completing the alteration documentation. Also address whether installation drawings will be provided and who will provide them.

- 5.2 <u>Phase-Out Plans</u>. Describe the phase-out plan for any equipment identified for removal (include equipment, spare parts and documentation at all levels of support). Identify by nomenclature and name all existing equipment that will be removed as part of this project. This may include utilizing the equipment to augment the supply infrastructure, availability for foreign military sales, demilitarization and safety hazards. If available, the EILSP for the phased-out system/equipment shall be updated to reflect phase-out plans.
- 5.2.1 <u>Equipment Phase-Out</u>. Identify by nomenclature, name and part number all equipment that will be phased-out as part of the project.
- 5.2.2 <u>Phase-Out Schedule</u>. State the phase-out schedule for replaced equipment when new acquisition occurs.
- 5.2.3 <u>Disposition of Phased-out Material</u>. State how phased-out equipment will be disposed of, who will initiate required documentation (including configuration change forms). State if any hazardous material or precious metal is involved.

#### **SECTION 6.0 - SUPPLY SUPPORT**

- 6.1 <u>Supply Support Concepts</u>. Describe the supply support (commercial, reimbursable, etc.) for this equipment. The supply support concept must be consistent with the supply support concept identified in the ILSP for the end-item system. Briefly summarize proper identification, planning and budgeting of spare parts.
- 6.2 <u>Supply Requirements</u>. The Project Officer should ensure the following support elements have been considered, either in the EILSP or other appropriate support documents. Where applicable, reference the appropriate support document.
  - Item name (equipment, publication, part)
  - Item nomenclature, model number or publication number
  - Who will supply the item
  - When items will be supplied
  - Manufacturer Commercial and Government Entity (CAGE) code or name
  - Item cost
  - Physical weight for each item and total for stored quantity
  - Cubic feet for each item and total for stored quantity
  - Security Requirements (if applicable)
  - Shelf life (if applicable)
- 6.2.1. Organizational Level. List parts to be issued and maintained as spares at this level and reference applicable support documents. Describe the method the unit will use to obtain replacement parts, assemblies, and equipment. Items should be listed to the Lowest Repairable Unit (LRU).
- 6.2.2 <u>Intermediate Level</u>. Identify the unit(s) or facility that will serve as this level of supply support. State what parts will be issued and maintained at this level and reference

- applicable support documents. Describe the method used to obtain replacement parts, assemblies and equipment. Items should be listed to the LRU.
- 6.2.3 <u>Depot/ICP Level</u>. Identify the Depot and Inventory Control Point (ICP) for spare parts and reference applicable support documents.
- 6.2.4 <u>SMEF Level</u>. If applicable, identify any spares consistent with the maintenance concept for this level. This may include spares for installed engineering and support baseline systems. List items to Lowest Repairable Unit (LRU).
- 6.3 Other Government Agencies. If spares or parts are available or supported in whole or in part by other Government agencies or the Federal Supply System (FSS) state the agency and parts, assemblies or equipment. For items from the FSS, identify source of supply and National Stock Number (NSN). Include Acquisition Advice Codes (AAC).
- 6.4 <u>Commercial Sources</u>. Identify any commercial repair sources used for maintenance and repair of the equipment. Provide manufacturer or distributors complete name, address, telephone number, POC, CAGE and any GSA schedules or contracts. Provide general terms and requirements of the intended maintenance contract and identify who will administer the contract.
- 6.5 <u>Delivery Locations</u>. Identify where the "A" condition (ready for issue) asset will be delivered (e.g., ELC, MLC, individual units, etc.)
- 6.6 <u>Targeted Support Dates</u>. Identify when support will be available for each level of supply support. It is vital that support be available to units at time of installation. Include warranty information and, if required, Interim Support Plan (ISP).

### **SECTION 7.0 - MAINTENANCE SUPPORT**

- 7.1 <u>Maintenance Support Concept</u>. Describe the overall maintenance philosophy for the equipment. The maintenance philosophy for the equipment must be consistent with the maintenance concept identified in the ILSP for the end-item system.
- 7.2 <u>Maintenance Requirements</u>. Describe the maintenance requirements, consistent with the maintenance philosophy identified in the ILSP for the end-item system, for the following:
- 7.2.1 <u>Organizational Level</u>. Describe the organizational level maintenance philosophy for the equipment. Identify who will maintain the equipment, approximate Maintenance Man-Hours (MMH), number of personnel and required personnel qualifications.
- 7.2.2 <u>Intermediate Level</u>. Describe the intermediate level maintenance philosophy for the equipment. Provide the same information as in other levels of maintenance.
- 7.2.3 <u>Depot/ICP Level</u>. Describe the depot-level maintenance philosophy for the equipment. Provide the same information as in other levels of maintenance.

- 7.2.4 <u>SMEF Level</u>. Describe the SMEF-level maintenance management philosophy for the equipment. Provide the same information as in other levels of maintenance.
- 7.3 Other Government Agencies. Identify other Government agencies that will be responsible for providing maintenance on this equipment.
- 7.4 <u>Commercial Maintenance</u>. Identify any commercial repair sources used for maintenance and repair of the equipment. Provide general terms and requirements of the intended maintenance contract and identify who will administer the contract.
- 7.5 <u>Warranty Repair</u>. Identify the type of warranty provided for all parts covered under the equipment acquisition. Address what items are covered, when coverage starts/ends and actions required to start warranty/make warranty claims. Warranty information shall be provided to appropriate units on the Equipment Support Sheets.
- 7.6 <u>Planned Maintenance System.</u> Check for Navy PMS or CGPMS. Contact the PMS Manager to determine whether PMS should be developed to provide a standardized planned maintenance program for the equipment/system being acquired. List all PMS requirements. If PMS will not be developed, provide the source of planned maintenance guidelines.
- 7.7 <u>Reliability, Maintainability and Availability</u>. Provide Reliability, Maintainability and Availability values, if available, and provide the source or basis for these values.

# SECTION 8.0 – SUPPORT EQUIPMENT AND TEST EQUIPMENT

- 8.1 <u>Support Equipment and Test Equipment Requirements</u>. Identify the Support Equipment, General Purpose Test Equipment/General Purpose Electronic Test Equipment (GPTE/GPETE) and Special Purpose Test Equipment/Special Purpose Electronic Equipment (SPTE/SPETE) requirements for the levels of maintenance below. If new test equipment is required, provide information on who will procure the equipment and when it will be delivered to the applicable maintenance level. Address whether the equipment has any special calibration or maintenance schedule requirements.
- 8.1.1 <u>Organizational Level</u>. Identify the support equipment and test equipment requirements for the Organizational Level.
- 8.1.2 <u>Intermediate Level</u>. Identify the support equipment and test equipment requirements for the Intermediate Level.
- 8.1.3 <u>Depot/ICP Level</u>. Identify the support equipment and test equipment requirements for the Depot/ICP Level.
- 8.1.4 <u>SMEF Level</u>. Identify the support equipment and test equipment requirements for the SMEF Level.

# **SECTION 9.0 - TECHNICAL DOCUMENTATION**

- 9.1 <u>Provisioning Technical Documentation</u>. Specify requirements for Provisioning Technical Documentation (PTD), engineering drawings, depot level repair documentation, including any proprietary constraints, rights in technical data and software/firmware etc., needed to support the equipment. Identify who will maintain overall system technical documentation.
- 9.2 <u>Maintenance Documentation</u>. Specify the technical documentation provided. Include publication or drawing number, stock number (if applicable), and supplier. List any publications unique to a specific maintenance level.
- 9.3 <u>Operational Documentation</u>. List the operator documentation provided. Include publication number, stock number (if applicable), supplier, and quantity.

#### **SECTION 10.0 - MANPOWER AND PERSONNEL**

- 10.1 <u>Personnel Resource Requirements</u>. State billets and additional personnel required to operate and support the equipment and identify the source of funding for them. Refer to budgetary documents (i.e., Resource Proposal, etc.) where appropriate. Specify whether follow-on funding will be required as a recurring item. State how funding will be provided and who (program/sponsor) will provide it. Identify the personnel resources needed at the following levels:
- 10.1.1 <u>Organizational Level</u>. Identify the personnel resources needed at the Organizational level.
- 10.1.2 <u>Intermediate Level</u>. Identify the personnel resources needed at the Intermediate level.
- 10.1.3 Depot/ICP Level. Identify the personnel resources needed at the Depot/ICP level.
- 10.1.4 SMEF Level. Identify the personnel resources needed at the SMEF level.

# SECTION 11.0 - PACKAGING, HANDLING, STORAGE AND TRANSPORTATION

- 11.1 <u>Special Considerations</u>. Describe any special considerations for the handling and packaging of the equipment. Identify who will be responsible for packing and storing of initial issue and spare equipment and for funding and maintaining liability for transportation and shipping of equipment. Describe environmental conditions (temperature, humidity, etc.) required for storage of equipment/system, packaging of equipment/system during storage and where it is to be stored until installation. Identify any special markings, e.g., shelf life codes, "mark/for", etc.
- 11.2 <u>Hazardous Materials</u>. Identify any hazardous materials in the equipment/system or packaging. Attach Material Safety Data Sheets.
- 11.3 <u>Demilitarization Codes</u>. Identify the demilitarization codes applicable to the equipment.

#### SECTION 12.0 – TRAINING AND TRAINING SUPPORT

- 12.1 <u>Training Requirements</u>. Describe the overall training philosophy for the equipment, both the operator and maintainer. The training philosophy for the equipment must be consistent with the training concept(s) identified in the ILSP for the end-item system. Identify training requirements at all levels listed below:
- 12.1.1 <u>Organizational Level</u>. Identify the training requirements at the Organizational Level.
- 12.1.2 <u>Intermediate Level</u>. Identify the training requirements at the Intermediate Level.
- 12.1.3 <u>Depot/ICP Level</u>. Identify the training requirements at the Depot/ICP Level.
- 12.1.4 <u>SMEF Level</u>. Identify the training requirements at the SMEF Level.
- 12.2 <u>USCG Training Centers</u>. Identify the resources required to "train the trainer" on the subject matter. Identify any mock-ups, new equipment training or training aids required.
- 12.3 <u>Training Resources</u>. List possible sources of training (Coast Guard sources, commercial sources, Other Government Agencies (OGA) sources. Identify locations, dates, duration and funding sources for initial/recurring training. Identify any mock-ups, new equipment training or training aids required. Identify sources of computer-based training or interactive courseware. Provide the following information for each source of training:
  - Company name
  - Address
  - Telephone number
  - Point of contact
  - Course name
  - Duration
  - Cost
  - Location
  - Short description

#### **SECTION 13.0 - FACILITIES SUPPORT**

13.1 <u>Facilities Requirements</u>. Identify the impact on existing facilities at each level of maintenance listed below. Identify how the activity will be affected by the acquisition in terms of storage of material, equipment space, power requirements, environmental concerns, etc.

- 13.1.1 <u>Organizational Level</u>. Identify the impact on existing facilities at the Organizational Level.
- 13.1.2 <u>Intermediate Level</u>. Identify the impact on existing facilities at the Intermediate Level.
- 13.1.3 <u>Depot/ICP Level</u>. Identify the impact on existing facilities at the Depot/ICP Level.
- 13.1.4 <u>SMEF Level</u>. Identify the impact on existing facilities at the SMEF Level.

# **SECTION 14.0 - COMPUTER RESOURCES SUPPORT**

- 14.1 <u>Requirements</u>. Identify subsystems that have embedded software/firmware. Identify and describe the facilities, hardware, system software, support tools, training and personnel needed to support these systems.
- 14.2 <u>Documentation</u>. Briefly describe the computer resources support planning documentation (i.e. Computer Operator's Manual (COM), Software User's Manual (SUM), Version Description Document (VDD)) that will be used to support the system. Identify who will provide these details and when, who will approve and review them, update the documentation for the life cycle of the document, and how the information will be distributed. Identify who will provide life cycle support for updating/maintaining the system software.

#### **SECTION 15.0 - LOGISTICS MILESTONES**

- Milestones. Milestones should be listed, as a minimum, by quarter and fiscal year. Project Milestones, as a minimum should include:
  - Start date
  - Contract award
  - First deliverable
  - Prototype available
  - Warranty period
  - Support date
  - Deployment date
  - Completion date
  - EILSP/ESS reviews or updates
  - Expected end of life

# EILSP AND ESS DECISION MATRIX FOR HM&E EQUIPMENT

Condition	No EILSP Required	Develop ESS	Develop Formal EILSP
Determine Mission Criticality	Equip/Sys is not critical to mission	Equip/Sys is critical to unit's mission, however casualty will not severely degrade the unit's primary mission	Equip/Sys is Mission Critical. Loss of Equip/Sys will severely degrade the ability of the unit to perform its primary mission
Determine Complexity of Equip/System	Equip/Sys is not complex. Has minimal equipment interfaces	Equip/Sys is complex but easily supported. Equipment/Sys is Commercial-off the shelf.	Equip/Sys is complex. It may have several critical interfacing systems or complex subcomponents
Evaluate Reliability, Maintainability, and Availability factors	RMA factors indicate Equip/Sys has low failure rates and is easily maintained	RMA factors indicate most characteristics are good, however may be some concern over extended life cycle	RMA factors indicate that Equip/Sys is suspect due to failure. Future availability of both tech support and parts are in question
Determine if Equip/Sys has established Support Infrastructure (orphan systems)	Infrastructure in place is sufficient to maintain Equip/Sys	Equip/Sys does have some support locally, however due to nature of the Equip/Sys it may be non supported in future	Equip/System has not been captured under a support contract or long term maintenance plan

 When determining which task will be performed, the column with a match in the farthest right hand column will indicate which process development takes precedence. However, the appropriate Equipment/System Manager will make the final determination based on all factors.

The Coast Guard Mission Criticality Code (MCC) indicates what impact on the mission capability of the cutter/unit would result should a configuration item fail. The code is assigned to a weapon system or end item in a specific shipboard/shore unit to denote its importance to the mission of the unit in which the component is installed. The MCC of equipment is an indicator of the importance of that equipment to the missions of the unit.

MCC <u>IMPACT</u>

Failure of component /equipment causes minor mission impact or partial loss of secondary mission.

2	Failure of component/equipment causes total loss/severe degradation of secondary mission.
3	Failure of component/equipment cause severe degradation of primary mission.
4	Failure of component/equipment causes total loss of mobility/ severe degradation of mobility or total loss of primary mission. Loss of this equipment results in a safety hazard to the platform or crew.

# Complexity of Equipment/System is defined as:

The complexity of a system/equipment is a subjective indication of the "intricate nature" of the equipment or system to the missions and operations of the unit. It describes the level of intricacy as having many complicated interrelating parts or interfacing sub-components. Complexity of a system/equipment can further be defined as the various levels of difficulty that may be encountered in order to resolve casualties or analyze information.

# Reliability, Maintainability, and Availability are defined as:

Reliability can be defined as the probability that a system or product will perform in a satisfactory manner for a given period of time when used under specified operating conditions. This definition stresses the elements of probability, satisfactory performance, time, and specified operating conditions. In addition, Reliability is frequently defined in terms of mean time between failure (MTBF), mean time between maintenance (MTBM), and mean time to repair (MTTR). MTBF and MTBM may be calculated and expressed as:

MTBF = number of failures MTBM = 
$$\underline{1}$$
  
total operating hours  $1 / \text{mtbm} \Sigma + 1 / \text{mtbm} \Omega$ 

- mtbm $\Sigma$  = mean or average interval of unscheduled (corrective) maintenance.
- mtbm $\Omega$  = mean or average interval of scheduled (preventative) maintenance.
- These calculations are generally provided by the Original Equipment Manufacturer (OEM) in the salient characteristics portion of the Technical Publication.

Maintainability, like reliability, is an inherent characteristic of system or product design. It pertains to the frequency, ease, accuracy, safety, and economy in the performance of maintenance actions. Maintainability can also be defined as a characteristic in the design that can be expressed in terms requirements or estimations based on both preventative maintenance (scheduled) requirements and corrective (unscheduled) maintenance requirements.

Availability, or the measure of the degree a system is in the operable and committable state, at the start of a mission, when the mission is called for at an unknown random point in time.

### EQUIPMENT SUPPORT SHEET PROCEDURAL GUIDE

The Equipment Support Sheet (ESS) must be completed and delivered with the first installation of the new equipment. The ESS provides a concise summary of logistics information contained in the EILSP directly to field personnel responsible for maintaining and supporting the equipment. The ESS will normally be related back to the equipment/system EILSP. A standalone ESS is permitted **only** for HM&E equipment when the criteria listed in enclosure (4) for an EILSP are not met. In those instances, the ESS shall have a cover sheet in addition to the information required below. The ESS should be no longer than three pages and shall follow the format below.

- 1.0 <u>Introduction</u>. State the purpose of the support sheet and introduce the equipment to the end user/technician.
- 2.0 <u>System information</u>. Provide a description of the equipment, configuration, and purpose. If equipment is being removed/replaced, identify the equipment. (Example: equipment XXX replaces the YYY equipment)
- 3.0 <u>Property Reporting</u>. Identify the applicable property-reporting database, which will be used. Provide all information required to report the equipment in the asset database, e.g., assigned nomenclature, parent-child relationship (if any), cost and manufacturer.
- 4.0 <u>Hardware Configuration</u>. Provide the end user with descriptions of equipment settings and indications required for the correct operation of the equipment, e.g., indicators or switch settings on circuit boards. This information will usually come from the technical manuals. The section may require action by the installing activity after equipment installation and final configuration.
- 5.0 <u>Software Configuration</u>. This section provides a list of all required (supplied) software, version numbers, licenses, and the basic concept of operation or purpose. This section also includes the Operating System if it is non-standard or specific to the software environment.
- 6.0 <u>Supply Support</u>. Provide information required to obtain spare or replacement parts. Provide the APL number if one has been developed. If Coast Guard supply support is planned, indicate here. If the equipment is supported by another government agency, provide the agency and procedures necessary to obtain parts. If the equipment is commercially supported, provide the manufacturer's name, phone number, a Point of Contact (POC) and shipping instructions.
- 7.0 <u>Technical Support</u>. Identify the technical support chain. If applicable, identify who is the SMEF for the equipment/system and if/how technical assistance is available. Identify how the equipment is supported (by Unit, ESU/ESD, MLC, SMEF, ELC, or OGA). Provide a prioritized list of contacts, including phone numbers, to assist in repair or technical questions. If the item is commercially supported, provide a POC, any costs

- involved, and who funds repairs. If the item is under warranty, explain the specifics of the warranty and how the unit obtains repairs or replacements.
- 8.0 <u>Technical Documentation</u>. Provide the source of available operator manuals, technical manuals and provisioning technical documentation. If available, provide manual numbers or stock numbers. Identify source of supply and requisitioning information. If drawings are available, provide or reference a list of the drawings and procedures for obtaining them. Identify the Configuration Manager (CM) for the equipment/system.
- 9.0 <u>Maintenance Support</u>. Reference any required or recommended Planned Maintenance Procedures, including CGPMS, IMP/MPC, or Navy PMS MIP/MRC numbers, if available. If no PMS exists, but is planned, indicate that here. If manufacturer recommended procedures (preventive maintenance, corrective maintenance, alignments, adjustments, calibration, etc.) will be used, indicate where those procedures are located in the technical manuals and the frequency to be conducted.
- 10.0 <u>Test Equipment</u>. Identify any GPTE/GPETE or SPTE/SPETE, including SCAT code if appropriate.
- 11.0 <u>Training</u>. Give sources of training, if any. Specify if installation training will be provided. Provide a POC, approximate cost, location, and availability, if applicable.

#### **ACRONYMS**:

AAC Acquisition Advice Code
ACR Allowance Change Requests
AIM Accountable Item Management

Ao Operational Availability APL Allowance Parts List

ARSC Aircraft Repair and Supply Center

C2CEN Command and Control Engineering Center CAGE Commercial and Government Entity

CCF Configuration Change Forms
CDM Configuration Data Manager

CG Coast Guard

CGPMS Coast Guard Preventive Maintenance System

CM Configuration Manager COM Computer Operator's Manual ECR Engineering Change Request

EILSP Equipment/Systems Integrated Logistics Support Plan

ELC Engineering Logistics Center

ELEX Electronics

ESD Electronics Support Detachment

ESS Equipment Support Sheet ESU Electronics Support Unit FSS Federal Supply System

GPETE General Purpose Electronic Test Equipment

GPTE General Purpose Test Equipment GSA General Services Administration

HAZMAT Hazardous Material

HM&E Hull, Mechanical and Electrical

**ICP Inventory Control Point Integrated Logistics Support** ILS **ILSP Integrated Logistics Support Plan IMP** Index of Maintenance Pages **Integrated Product Team** IPT ISP Interim Support Plan Lowest Repairable Unit LRU LSU Loran Support Unit Mission Criticality Code **MCC** Maintenance Index Page MIP

MIPR Military Interdepartmental Purchase Request

MLC Maintenance Logistics Command

MMH Maintenance Man-Hours
 MNS Mission Needs Statement
 MPC Maintenance Procedure Card
 MRC Maintenance Requirement Card

# Enclosure (6) to COMDTINST 4105.7

MTBF Mean Time Between Failure

MTBM Mean Time Between Maintenance

MTTR Mean Time To Repair NSN National Stock Number

OEM Original Equipment Manufacturer

OGA Other Government Agency

POC Point of Contact

POE Project Operating Environment PMS Planned Maintenance System

PTD Provisioning Technical Documentation

RF Radio Frequency

RMA Reliability, Maintainability & Availability

ROC Required Operational Capability

RP Resource Proposal SCAT Special Category

SMEF System Management and Engineering Facility
SPETE Special Purpose Electronic Test Equipment

SPTE Special Purpose Test Equipment

SUM Software User's Manual

TISCOM Telecommunication and Information Systems Command

USCG United States Coast Guard VDD Version Description Document